

PRODUCT IDENTIFICATION



Product Name: Ethyl Acetate
CAS Number: 141-78-6
Molecular Formula: C₄H₈O₂
Molecular Weight: 88.11 g/mol
Grade: Technical
Purity / Concentration: Not Available
Synonyms: Ethyl Ethanoate, Acetic Ether

PRODUCT OVERVIEW

Ethyl Acetate (CAS 141-78-6) is a versatile, high-purity technical grade solvent characterized by its colorless appearance and distinct fruity odor. With a high assay of 99.8% and extremely low impurity levels, such as 0.02% water content, it is an essential chemical for diverse industrial applications requiring consistent performance.

Grade Significance: Technical grade indicates that this product is manufactured to provide high-performance chemical reliability for industrial and manufacturing processes where consistency is essential for quality control.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Purity Gc	%	99.9	99.8	—	GC/Titration
Color (APHA)	APHA	5	—	5	APHA
Specific Gravity (20°C)	g/mL	0.902	0.9	0.903	Hydrometer @ 25°C
Water Karl Fischer	%	≤ 0.03 %	—	—	Karl Fischer
Acidity As Acetic	%	ND	—	0.01	Titration per ACS/USP
Deg Content	%	ND	—	0.04	GC

ND = Not Detected. Values are typical and may vary by lot.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Colorless, volatile liquid with a characteristic fruity odor	Odor	Sweet, fruity odor
Form	Liquid	Boiling Point	171 °F at 760 mmHg (NTP, 1992)
Melting / Freezing Point	-118.5 °F (NTP, 1992)	Flash Point	24 °F (NTP, 1992)
Specific Gravity	0.902	Solubility	Soluble in water, alcohols, and most organic solvents
Molecular Formula	C ₄ H ₈ O ₂	Molecular Weight	88.11 g/mol
Vapor Pressure (20°C)	97 mmHg	Viscosity (25°C)	0.45 cP
Refractive Index (20°C)	1.372	Density (25°C)	0.902 g/mL
Partition Coefficient (log P)	-0.3	Decomposition Temp.	Not applicable (thermally stable under 25°C)

APPLICATIONS

1. **Analytical Chemistry** — It serves as a critical mobile phase component in reversed-phase high-performance liquid chromatography (HPLC) for the precise separation of complex organic compounds.
2. **Coatings and Paints** — Due to its excellent solvency power, this liquid is widely utilized in the formulation of paints and varnishes to effectively dissolve a broad spectrum of resins.
3. **Pharmaceutical Manufacturing** — It is employed in liquid-liquid extraction processes, providing the necessary purity for the successful isolation of pharmaceutical intermediates.
4. **Industrial Maintenance** — This solvent is highly effective for cleaning and degreasing metal components, ensuring surfaces are prepped correctly for further manufacturing steps.

STORAGE & HANDLING

Proper storage is critical because Ethyl Acetate is a highly flammable liquid with a flash point of -4°C , posing a significant fire risk if exposed to heat or sparks. It must be kept in a cool, well-ventilated area away from ignition sources to prevent the accumulation of hazardous vapors and ensure workplace safety.

- Store in a cool, well-ventilated area away from heat sources.
- Use containers made of HDPE or glass to prevent chemical reactions.
- Keep away from strong oxidizing agents and acids.
- Ensure proper PPE, including gloves and goggles, is worn during handling.
- Avoid exposure to light to maintain product integrity.

AVAILABLE PACKAGING

- 1 Quart
- 1 Gallon
- 5 Gallon
- 15 Gallon
- 55 Gallon

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: **Danger**



Hazard Statements:

- H225: Highly Flammable liquid and vapor [Danger Flammable liquids]
- H319: Causes serious eye irritation [Warning Serious eye damage/eye irritation]
- H336: May cause drowsiness or dizziness [Warning Specific target organ toxicity, single exposure; Narcotic effects]

Emergency Contact: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

For complete safety information, refer to the Safety Data Sheet (SDS) for this product.

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